Integrated Risk Information System (IRIS) Data Base Enhancements and Process

Changes

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The IRIS is a publicly accessible U.S. Environmental Protection Agency (EPA) data base containing information on the potential adverse health effects associated with chronic exposure to environmental chemicals. The information on IRIS is used throughout EPA and the world to produce consistent risk assessments based on analysis of peer-reviewed data on a chemical's toxicity and dose-response relationships. New features have been added to IRIS to meet the expanded needs of end users.

http://www.epa.gov/iris/



Process Changes for IRIS Assessment Development and Review

- The Office of Research and Development has expanded its IRIS staff and is providing more centralized functions for the IRIS program.
- The IRIS program is conducting more external scientific peer reviews by panel meetings rather than by mail reviews. This step is being taken to provide the best possible scientific review of each assessment.
- Peer review panel meetings are open to the public for observation, making the review process more transparent.
- EPA is now positioning the external peer review step at the end of the IRIS assessment review process, strengthening the role of peer review in informing EPA's final decision-making.

Screening-Level Literature Review

- General findings of EPA's screening-level review of the recent health effects literature have been added to the "EPA Document and Review" sections of 460 IRIS Summaries.
- This review consisted of a screen of the more recent literature contained in selected secondary literature sources (e.g., Agency for Toxic Substances and Disease Registry Toxicological Profiles) and study titles and abstracts retrieved from searches of on-line toxicological data bases (e.g., MEDLINE and TOXLINE).
- IRIS users may request information about the review methods and results from the IRIS Hotline at hotline.iris@epa.gov or 202-566-1676.

IRIS Chemical Tracking

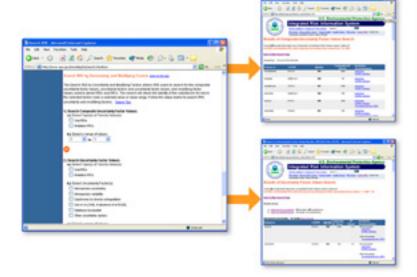
- An information reporting system for tracking the progress of chemical assessments in the IRIS program.
- Designed to report start and completion dates for milestones in the process for IRIS assessment development and review.
- · Planned for IRIS internet availability.

Database Enhancements

The IRIS data base enhancements include search features, results from the EPA's literature screening project and a planned chemical assessment tracking feature. All of the IRIS enhancements are designed to meet the expanded needs of end users.

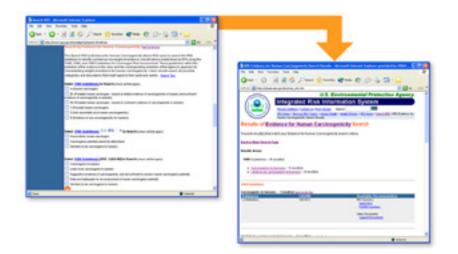
Search by Uncertainty and Modifying Factors

- Allows IRIS users to search for composite uncertainty factors, individual uncertainty factors, and modifying factors used to derive RfDs and RfCs.
- The search will return the identity of the substances for which the selected factors have a selected value or value range.



Search by Evidence for Human Carcinogenicity

 Allows IRIS users to search the IRIS database to identify substances by weight-of-evidence descriptors established by EPA using the 1986, draft 1996, and draft 1999 Guidelines for Carcinogen Risk Assessment.



These enhancements are designed to improve the timeliness, transparency, consistency, and quality of IRIS assessments for the public as well as provide a better management tool for the EPA.